REMARKS

Reconsideration of the above-identified application in view of the amendment above and the remarks below is respectfully requested.

No claims have been canceled or amended in this paper. New claim 55 has been added in this paper. Therefore, claims 11-28 and 34-55 are pending and are under active consideration.

Claims 11, 16-18, 20-28, 34-35, 37-39, 44-45, and 47-48 stand rejected under 35 U.S.C. 103(a) "as being unpatentable over Kerr et al. [(US 2004/0062016)] in view of Nowaczyk (US Patent No. 6,096,153)." In support of the rejection, the Patent Office states, with respect to the rejected independent claims, the following:

> As to claim 11, refer to figure 13, Kerr et al. (hereinafter as Kerr) teaches a tag comprising:
> an inlay (fig. 13) comprising:
> i. a carrier sheet 30,
> ii. an antenna 40, and
> iii. a wireless communication device 60.
>
> Kerr discloses
> a. a top plastic extrudate member 70 and
> b. a bottom plastic extrudate member 20.
>
> Kerr fails to disclose the bottom plastic extrudate member 20 being shaped to include a cavity adapted to receive antenna 40 and wireless communication device 60, wherein the top and the bottom plastic extrudate member cooperatively encapsulate the tag circuit.
>
> However, Nowaczyk discloses the concept of forming a cavity in the bottom plastic extrudate to provide a protective housing for a tag resonance circuit. Therefore, [it] would have been obvious to one skilled in the art to house the tag inlay of Kerr's in Nowaczyk's housing because such housing would provide additional protection for the inlay than just the top and bottom extrudate 70 and 20 disclosed in Kerr.
>
> ...

As to claim 16, refer to figure 13, Kerr et al. (hereinafter as Kerr) teaches a tag comprising:

a. an inlay (fig. 13) comprising:

i. a carrier sheet 30,

ii. an antenna 40, and

iii. a wireless communication device 60.

Kerr discloses

b. a top plastic extrudate member 70 and

c. a bottom plastic extrudate member 20.

Kerr fails to disclose a plastic casing comprising:

i. a bottom member shaped to define a longitudinal cavity, and

ii. a top member applied to the bottom member to at least partially include the longitudinal cavity.

However, Nowaczyk discloses the concept of providing such plastic casing to provide a protective housing for a tag resonance circuit. Therefore, [it] would have been obvious to one skilled in the art to house the inlay of Kerr's in Nowaczyk's housing because such housing would provide additional protection for the inlay than just the top and bottom extrudate 70 and 20 disclosed in Kerr.

...

As to claim 26, refer to figure 13, Kerr et al. (hereinafter as Kerr) teaches a tag comprising:

a. an inlay (fig. 13) comprising:

i. a carrier sheet 30,

ii. an antenna 40, and

iii. a wireless communication device 60.

Kerr discloses

b. a top plastic extrudate member 70 and

c. a bottom plastic extrudate member 20.

Kerr fails to disclose a plastic casing comprising:

i. a bottom member shaped to define a longitudinal cavity, and

ii. a top member applied to the bottom member to at least partially include the longitudinal cavity.

However, Nowaczyk discloses the concept of providing such plastic casing to provide a protective housing for a tag resonance circuit. Therefore, [it] would have been obvious to one skilled in the art to house the inlay of Kerr's in Nowaczyk's housing because such housing would provide additional protection for the inlay than just the top and bottom extrudate 70 and 20 disclosed in Kerr.

...

As to claim 34, Kerr discloses a method of continuously manufacturing a plurality of tags, comprising the steps of:

a. providing a single continuous strip 20

b. depositing a continuous supply of inlays (fig. 13) into the continuous strip 20,

c. the continuous supply of inlays comprising a carrier web 30, a plurality of antennae 40 disposed on the carrier web 30 at spaced intervals (fig. 13), and a wireless communication device 60 coupled to each of the antennae (fig. 13),

[d]. applying a cover 70 over the continuous supply of inlays (fig. 13)

[e]. cutting the continuous supply of inlays and the single continuous strip between successive antennae to yield individual tags (this is inherent because each of RFID devices is for use on separate item or individual).

Kerr fails to disclose that the single continuous strip is shaped to include a continuous longitudinal cavity along its entire length. However, Nowaczyk discloses the concept of providing such housing with continuous longitudinal cavity to provide a protective housing for a tag resonance circuit. Therefore, [it] would have been obvious to one skilled in the art to house the inlay of Kerr's in Nowaczyk's housing because such housing would provide additional protection for the inlay than just the top and bottom extrudate 70 and 20 disclosed in Kerr's.

...

As to claim 44, Kerr discloses a method of continuously manufacturing a plurality of tags, comprising the steps of:

a. providing a single continuous strip 20

> b. providing a plurality of inlays, each comprising a carrier sheet 20, an antenna 40 disposed on the carrier sheet and a wireless communication device 60 coupled to the antenna 40,
>
> c. depositing the entire inlay onto strip 20
>
> d. applying single continuous web 70 over the continuous supply of inlays (fig. 13)
>
> e. cutting the continuous strip and the single continuous web between successive antennae to yield individual tag (this is inherent because each of RFID devices is for use on separate item or individual).
>
> Kerr fails to disclose a plurality of cavities on the single continuous strip 20. However, Nowaczyk teaches a tag including a plastic casing comprising longitudinal cavities (fig. 2 or 3). In light of Nowaczyk's teaching, it would have been obvious to one skilled in the art to provide a housing cavities on continuous sheet 20 as that disclosed in Nowaczyk to house the inlay of Kerr's because it would provide better protection of the inlays.
>
> ...

Applicants respectfully traverse the subject rejection. As best understood by Applicants, the Patent Office appears to be taking the position (i) that Kerr et al. teaches a carrier sheet 30, an antenna 40, a wireless communication device 60, a top plastic extrudate member 70, and a bottom extrudate member 20 but does not teach the bottom extrudate member 20 defining a cavity and does not teach the top plastic extrudate member 70 and the bottom extrudate member 20 cooperatively encapsulating said antenna 40 and said wireless communication device 60; (ii) that Nowaczyk teaches forming a cavity in the bottom plastic extrudate; and (iii) that it would have been obvious to one of ordinary skill in the art at the time of the invention to house the tag inlay of Kerr et al. in the housing of Nowaczyk because such a housing "would provide additional protection for the inlay than just the top and bottom extrudate 70 and 20 disclosed in Kerr." Applicants respectfully disagree for at least the reasons below.

First, it is well-settled law that a person of ordinary skill in the art would not have been motivated to combine the teachings of two references when the references themselves teach away from the combination. This is precisely the case in the proposed combination of Kerr et al. and Nowaczyk as Kerr et al. and Nowaczyk are directed at mutually exclusive approaches to associating tags with articles. Kerr et al. is directed at "thin mediums of material such as paper, film and fabric" ([0003)] and at RFID tags that allow electronic information to be associated with such thin media ([0004]). Kerr et al. points out that, in the past, RFID tags have been joined to an item after the item has been fully assembled ([0007]). Kerr et al. explains that one disadvantage to such an approach is that the RFID tag may easily become separated from the article and that another disadvantage is that there are costs resulting from separately manufacturing the medium and the tag and then joining the tag to the medium ([0008]). In addition, Kerr et al. explains that yet another disadvantage to such an approach is that the RFID tag has a non-uniform cross-sectional thickness that can make the tag vulnerable to incidental damage and that can detract from the appearance of the medium ([0009]). Kerr et al. then goes on to explain that one approach to addressing the aforementioned disadvantages has been to incorporate the RFID tags inside clam shell type casings or between sheets of laminate material ([0010]). However, Kerr et al. then explains that such approaches are unsuitable for use with thin media such as paper, film and fabric as "the increased thickness and uneven cross section caused by the presence of RFID electronics and antenna sandwiched between laminations can interfere with subsequent fabrication processes causing damage to fabrication equipment and the RFID electronics and or to the medium itself" ([0011]).

Nowaczyk is directed at a method and system for manufacturing security tags of the type that are adhered to a fully assembled article. According to one embodiment, the method and system of

Nowaczyk involves providing a first continuous web of plastic material. A plastic former is then used to form housing cavities in the plastic material without separating the continuous web. A resonator feeder is downstream of the plastic former and is used to place a resonator strip in each of the housing cavities. A lid stock supply is downstream of the resonator feeder and places lid stock material over open ends of the housing cavities to seal the housing cavities with the resonator strips therein. A bias feeder is downstream of the resonator feeder and is used to attach bias strips to the outer surface of the lid stock material remote from the housing cavities. A cover supply is adjacent the bias feeder and is used to place cover stock material over the bias strips and outer surface of the lid stock material. The cover stock material may comprise a laminate of a paper liner with its release coating and of stock material for the cover with an adhesive layer.

In view of the above, it can clearly be seen that one of ordinary skill in the art would not have been motivated to make the proposed modification **because the resulting product, namely, the Kerr inlay housed within the Nowaczyk housing is precisely the type of tag that is explicitly taught away from by Kerr et al. as being undesirable for use with thin media** ([0007]-[0009]).

Moreover, a person of ordinary skill in the art would have recognized that the Kerr tag operates by an entirely different mechanism than the Nowaczyk tag and, as a result, would not have been motivated to use the Kerr inlay in the Nowaczyk housing. More specifically, Kerr et al. involves the use of RFID technology whereas Nowaczyk does not involve the use of RFID technology, but rather, involves technology comprising the combination of a resonator and a magnetizable bias strip. As explained in Nowaczyk (see col. 1, lines 30-45), in a resonator-containing device, a resonator strip is loosely mounted in a container to permit its vibration within the container. A magnetic bias strip is attached to the outside of the container and is covered with

a plastic layer. When the bias strip is magnetized, the resonator vibrates in response to a signal from a transmitter. As can clearly be appreciated, the RFID label of Kerr et al. does not include a resonator strip and is not intended to vibrate. Consequently, a person of ordinary skill in the art would not have been motivated to use the Kerr inlay in the Nowaczyk housing.

Furthermore, Applicants respectfully disagree with the Patent Office's assertion that Kerr et al. teaches that members 20 and 70 are made of extruded plastic. There is absolutely no mention made in Kerr et al. that members 20 and 70 are made of extruded plastic.

Finally, with respect to claim 34, from which claims 35 and 37-39 depend, Applicants respectfully submit that neither Kerr et al. nor Nowaczyk teaches or suggests a method that comprises, amongst other things, providing a single continuous strip which is shaped to include a continuous longitudinal cavity along its entire length and depositing a continuous supply of inlays into the continuous longitudinal cavity. The Patent Office apparently concedes that Kerr et al. does not even teach a single continuous strip shaped to include a continuous longitudinal cavity along its entire length. Applicants respectfully submit that Nowaczyk does not cure all of the deficiencies of Kerr et al. as Nowaczyk fails to teach depositing a continuous supply of inlays into a continuous longitudinal cavity that extends along the entire length of a single continuous strip. Instead, Nowaczyk is limited to disclosing a method in which **a plurality of discrete cavities are formed in a web and then a plurality of discrete resonator strips are deposited into the plurality of discrete cavities.**

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 40-43 and 49-54 stand rejected under 35 U.S.C. 103(a) "as being unpatentable over Kerr et al. [(US 2004/00620160)] in view of Babb et al. (US 2001/0014377)." In support of the rejection, the Patent Office states the following:

> As to claims 40-43, Kerr fails to disclose that the cover comprises a plug molded onto the single continuous strip. However, the concept of encapsulating an RFID inlay with an epoxy material is conventional in the art as discussed in Babb et al. (hereinafter as Babb) (see para. 0006). Therefore, it would have been obvious to one skilled in the art to do the same for the inlays of Kerr's system because such encapsulation with a molded plug of epoxy material would secure the RFID transponder within the cavity and insure the connection between the transponder and the antenna in Kerr's system. Furthermore, one skilled in the art would have readily recognized the use of different material and techniques as that claimed in claims 41-43 to form and cure the molded plug.
>
> As to claims 49-52, Kerr discloses a method of continuously manufacturing a plurality of tags, comprising the steps of:
>
> a. providing a single continuous member 20,
>
> b. depositing an inlay into the continuous member 20, each inlay comprising a carrier sheet 30, an antenna 40 disposed on the carrier sheet 30, and a wireless communication device 60 coupled to antenna 40;
>
> c. applying a cover 70, equivalent to a plug, over the inlay
>
> d. cutting the single continuous strip between successive cavities (this is inherent because each of RFID devices is for use on separate item or individual).
>
> Kerr fails to disclose a plurality of cavities on the single continuous strip 20. However, Nowaczyk teaches a tag including a plastic casing comprising longitudinal cavities (fig. 2 or 3). In light of Nowaczyk's teaching, it would have been obvious to one skilled in the art [to] provide a housing cavities on continuous sheet 20 as that disclosed in Nowaczyk to house the inlay of Kerr's because it would provide better protection of the inlays.
>
> Kerr fails to disclose that applying a plug over each inlay. However, the concept of encapsulating an RFID inlay with an epoxy material is conventional in the art as discussed in Babb et al. (hereinafter as Babb)(see para. 0006). Therefore, it would have been

> obvious to one skilled in the art to do the same for the inlays of Kerr's system because such encapsulation with a molded plug of epoxy material would secure the RFID transponder within the cavity and insure the connection between the transponder and the antenna in Kerr's system. Furthermore, one skilled in the art would have readily recognized the use of different material and techniques as that claimed in claims 49-52 to form and cure the molded plug.
>
> As to claim 53, it is inherent that the single continuous strip in Kerr is formed by extruding a sheet of material and then forming cavities in the sheet of material by thermoforming.
>
> As to claim 54, this claimed feature is inherent in the combined system since the RFID tag must be complete before cutting or separation of the tags.

Applicants respectfully traverse the subject rejection.

Claims 40-43 depend ultimately from claim 34. Claim 34 is patentable over Kerr et al. (as well as being patentable over Kerr et al. in view of Nowaczyk) for at least the reasons given above. Babb et al. fails to cure all of the deficiencies of Kerr et al. (or Kerr et al. in view of Nowaczyk) with respect to claim 34. Therefore, based at least on their respective dependencies from claim 34, claims 40-43 are patentable over the applied combination of references.

With respect to claim 49, from which claims 50-54 depend, Applicants note that the Patent Office has apparently conceded that Kerr et al. fails to teach or to suggest a plurality of cavities in Kerr base layer 20. Nevertheless, the Patent Office is apparently arguing that, based on Nowaczyk (which, Applicants note, is not formally included in the present rejection), it would have been obvious to include cavities in Kerr base layer 20 to house the Kerr inlays. Applicants respectfully disagree for at least the reasons discussed above in connection with the rejection based on Kerr et al. in view of Nowaczyk. Babb et al. fails to cure all of the deficiencies of Kerr et al. in view of

Nowaczyk. Therefore, for at least the above reasons, claims 49-54 are patentable over the applied combination of references.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 12, 14 and 15 stand rejected under 35 U.S.C. 103(a) "as being unpatentable over Kerr et al. (US 2001/0014377)." In support of the rejection, the Patent Office states the following:

> As to claim 12, Kerr discloses a method of continuously manufacturing a plurality of tags, the method comprising the steps of:
>
> a. providing a continuous supply of inlays (fig. 13), the continuous supply of inlays comprising a continuous carrier web 30, a plurality of antennae 40 positioned on the continuous carrier web 30 at spaced intervals and a wireless communication device 50 coupled to each of the antennae,
>
> b. feeding continuous supply of inlays into an extruder (fig. 4) so as to yield a continuous block which includes the continuous supply of inlays surrounded by a plastic extrudate 70 and 20, and
>
> c. cutting the continuous block between successive antennae so as to yield individual tags, this step is inherent because each tag is to use separately on a different item or individual.
>
> Though Kerr fails to disclose a cross-head extruder, it would have been obvious to one skilled in the art to use a cross-head extruder in the Kerr extruding system because it is conventional in the art for applying layers of material on a web.
>
> As to claim 14, though not clearly stated in Kerr's, one of ordinary skill would have readily recognized that cooling step must [be] done only after the feeding step because the inlets must be formed before any other steps to be taken, and to wait for the continuous block to cool before cutting the continuous block into individual tag.
>
> As to claim 15, Kerr discloses the step of coupling a mounting adhesive to the underside of the continuous block (para. 0047).

Applicants respectfully traverse the subject rejection. As best understood by Applicants, the Patent Office appears to be taking the position (i) that Kerr et al. teaches the claimed method,

including the feeding of a continuous supply of inlays into an extruder, but does not disclose the use of a cross-head extruder; but (ii) that it would have been obvious "to use a cross-head extruder in the Kerr extruding system because it is conventional in the art for applying layers of material on a web." Applicants respectfully traverse the subject rejection for at least the reasons below.

The Patent Office's position is predicated on the premise that Fig. 4 of Kerr et al. teaches the feeding of a continuous supply of inlays into an extruder. Applicant respectfully submits that this premise is in error. **Nothing in Fig. 4 of Kerr et al. corresponds to an extruder**. Instead, all that Fig. 4 of Kerr et al. shows is the joining together at a pair of heated rollers 46 of a web 51 having an antenna layer 30 thereon to a material layer 50 having voids 52. Web 51 is supplied from a web supply reel 47, and material layer 50 is supplied from a material reel 48. The combined material 20 is stored on a take-up reel 49. Therefore, because Kerr et al. fails to teach or to suggest the feeding of a continuous supply of inlays into any sort of extruder, let alone a cross-head extruder, Kerr et al. fails to teach or to suggest the method of claims 12, 14 and 15.

Moreover, it should be noted that, in Fig. 4 of Kerr et al., voids 52 lack transponders 60. Therefore, Fig. 4 of Kerr et al. does not even disclose the claimed inlay, let alone the feeding of said inlay into an extruder.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 13, 19, 36, and 46 stand objected to "as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

Applicants respectfully traverse the subject objection. The subject objection is predicated on the objected claims being dependent from a rejected base claim. However, as explained above,

the rejection of the base claim is in error. Therefore, the subject objection is in error and should be withdrawn.

New claim 55, which finds support in the present application, for example, in Figs. 8 and 14, has been added in this paper. Claim 55 is patentable based at least on its dependency from claim 49 and further for the reason that the references of record do not teach or suggest a plug that is a one-piece member that covers the entirety of said inlay.

In conclusion, it is respectfully submitted that the present application is now in condition for allowance. Prompt and favorable action is earnestly solicited.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is

required for an extension of time under 37 C.F.R. 1.136 that is not accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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Dated: September 2, 2009

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 2, 2009.

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